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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/763,339	01/26/2004	Shawn R. Feaster	034047.003DIV1 (W 00-23B)	7108	
	7590	EXAMINER			
U.S. ARMY MED. RESEARCH & MATERIEL COMMAND			SHEN, BIN		
504 SCOTT STREET ATTN: MCMR-ZA-J (MS. ELIZABETH ARWIN		ETH ARWINE)	ART UNIT	PAPER NUMBER	
	CK, MD 21702-5012	,	1657		
			MAIL DATE	DELIVERY MODE	
			05/07/2010	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application	on No.	Applicant(s)				
		10/763,33	39	FEASTER ET AL.				
		Examiner		Art Unit				
		BIN SHEN	I	1657				
Period fo	The MAILING DATE of this communicati or Reply	on appears on the	cover sheet with the c	orrespondence ac	ldress			
A SHO WHIC - Exter after - If NO - Failur Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAILING IS IN THE MAILING IS	NG DATE OF TH CFR 1.136(a). In no evition. y period will apply and w by statute, cause the app	HIS COMMUNICATION ent, however, may a reply be tin II expire SIX (6) MONTHS from lication to become ABANDONE	N. nely filed the mailing date of this of D (35 U.S.C. § 133).	•			
Status								
1)🖂	Responsive to communication(s) filed or	n <u>29 March 2010</u> .						
2a)⊠	This action is <b>FINAL</b> . 2b)	☐ This action is n	on-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
5)□ 6)⊠ 7)□	Claim(s) <u>29-36,39 and 40</u> is/are pending 4a) Of the above claim(s) <u>31-34 and 36</u> i Claim(s) is/are allowed. Claim(s) <u>29, 30, 35, 39, 40</u> is/are rejected Claim(s) is/are objected to. Claim(s) are subject to restriction	s/are withdrawn f	rom consideration.					
Applicati	on Papers							
9)□	The specification is objected to by the Ex	aminer.						
-	The drawing(s) filed on is/are: a)[		objected to by the I	Examiner.				
	Applicant may not request that any objection	to the drawing(s) b	e held in abeyance. See	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the	correction is requir	ed if the drawing(s) is ob	jected to. See 37 C	FR 1.121(d).			
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
	t <b>(s)</b> e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-9	n48)	4) Interview Summary Paper No(s)/Mail Da					
3) 🔲 Inforr	e of Draftsperson's Patent Drawing Review (PTO-S nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	<sup>,</sup> 40)	5) Notice of Informal P 6) Other:					

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#### **DETAILED ACTION**

## Status of the Claims

Claims 29-36, 39, 40 are currently pending. Claims 31-34, 36 are withdrawn from further consideration.

Claims 29, 30, 35, 39, 40 are presented for examination on the merits.

### **Maintenance of Rejections:**

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29, 30, 35, 39 are again rejected under 35 U.S.C. 102(b) as being anticipated by London (1995).

London teaches a field kit for estimation of cholinesterase in whole blood (page 59, left column, 2<sup>nd</sup> full paragraph).

Therefore, London teaches a device for detecting, measuring or monitoring cholinesterase in blood sample comprising a cartridge (read as kit) with plurality of substrates (page 59, left column, 2<sup>nd</sup> full paragraph, lines 1-3; a detector for detecting reaction rates (colorimeter, page 59, left column, 2<sup>nd</sup> full paragraph, line 5); software for calculating protein concentration (page 59, left column, 2<sup>nd</sup> full paragraph, line 5, **Claim 29**); the cartridge/kit comprises reagent, buffer standard for measuring the reaction rates (see substrate for the enzymes on page 59, left column, 2<sup>nd</sup> full paragraph, lines 1-3, since the field kit estimate cholinesterase therefore inherently contains all necessary reagent/buffer/standard for measuring the reaction rates, **Claim 30**); wherein the kit is capable of detecting cholinesterase including plasma cholinesterase and erythrocyte cholinesterase (plurality of proteins, page 59, left column, 2<sup>nd</sup> full paragraph, lines 1-2, **Claim 35**); the field kit (Test-Mate OP kit, page 57, right column, 3<sup>rd</sup> full paragraph, lines 8-9) is inherently hand-held for easy application (**Claim 39**).

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Applicant's arguments filed 3/29/2010 have been fully considered but they are not persuasive.

Applicant argues that the software according to London is not the same as the software according to the instant invention.

It is the examiner's position that the instant application claims a device and software (including the equations/formula for calculation) is not considered a structural component of the device therefore does not add patentable weight to the device, thus the art rejection still applies.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 29, 40 are again rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of London and Jacobs (1993).

London's teachings anticipate claims 29 as above.

London does not teach cartridge triggers device automation when inserted.

Jacobs teaches a blood analyzer with an insertable cartridge (page 1891, left column, 1<sup>st</sup> full paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify/automate the device of London by using a insertable cartridge to trigger the automation of the device (Claim 40) because Jacobs teaches a cartridge that can be inserted in the device. One would have been motivated to automate the device because Jacobs et al. specifically described a cartridge in a blood analyzer and one of ordinary skill in the art has good

reason to automate the device by trigger the automation by inserting the cartridge for anticipated success in view of Jacob's teaching of an insertable cartridge for a blood analyzer.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention.

Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Applicant's arguments filed 3/29/2010 have been fully considered but they are not persuasive.

Applicant argues that neither London nor Jacobs teach/suggest the same software of instant invention to calculate the activity or the concentration of the protein using a set of equations as required by claim 29.

It is the examiner's position that the instant application claims a device and software is not considered a structural component of the device therefore does not add patentable weight to the device, thus the combination of London and Jacobs renders claims 29 and 40 obvious.

#### Conclusion

No claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning rejections or objections in this communication or earlier communications from the examiner should be directed to Bin Shen, whose telephone number is (571) 272-9040. The examiner can normally be reached on Monday through Friday, from about 9:00 AM to about 5:30 PM. A phone message left at this number will be responded to as soon as possible (i.e., shortly after the examiner returns to her office).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached at (571) 272-0925.

B Shen
Art Unit 1657

/Karen Cochrane Carlson/

Primary Examiner, Art Unit 1656